

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

EPA Region 5 Records Ctr.



246958

DATE: 16 OCT 1989

SUBJECT: Action Memorandum - Ceiling Increase Request for Underwater Drum Removal from Mississippi River, off Quincy, Illinois (Site ID #GP)

FROM: Walter F. Nied, On-Scene Coordinator *Jack Barnett for W.F.N.*
Emergency and Enforcement Response Branch - Section IITO: Basil G. Constantelos, Director
Waste Management DivisionTHRU: Mary A. Gade, Associate Division Director
Office of Superfund *W. Bondy to MAC 10/3*PURPOSE

The purpose of this memorandum is to obtain your approval for a ceiling increase of \$177,188 to continue the removal action at the Quincy Drum site in Quincy, Illinois (Mississippi River). This additional funding is needed to fund adjustments to the ERCS, TAT contractor costs and direct EPA intramural costs, as discussed below. This increase will raise the original project ceiling of \$205,986 to \$364,530. The site is not on the National Priorities List (NPL).

BACKGROUND

Removal activities at the Quincy Drum site commenced on October 4, 1989. On Sunday, October 8, 1989, a Target Map of the Search area was completed using data provided by the Side Scan Sonar equipment. This map identified 22 specific target areas to be searched using an underwater remotely operated vehicle which allows us to observe and videotape all objects in the target area. The increase in funding requested in this Action Memorandum is necessitated because the scope of this underwater investigation and removal has been significantly increased from the original 12 target areas to 22 as identified by the more accurate Side Scan Sonar Survey results. Because of the increase in number of targets, additional time will be expended to adequately evaluate all areas where drum-sized objects have been identified. This project will require an estimated additional nine (9) working days to complete. The requested cost adjustment are summarized in the Estimated Project Cost Table on the following page.

THREATS

The documented conditions at the Mississippi Drum site that meet the criteria for a removal action as stated in the National Contingency Plan, Section 300.65(b)(2), are as follows:

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- 1) Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain.

As stated above, a commercial diver was exposed to the contents of drums, resulting in burns to the exposed areas of his body. The burns were diagnosed as chemical burns by a physician.

The Mississippi River is utilized by commercial fisherman as well as local fisherman as a source of food for human consumption. This food supply is threatened by the presence of the drums of TCE, MEK, and acidic plating waste.

Acidic materials such as sulfuric acid, chromic acid and nitric acid are typical corrosive materials used in electroplating operations. These corrosive materials cause irritant effects to the eyes, skin, and respiratory passages and can lead to ulceration.

Exposure to TCE may cause irritation of the eyes, nose and throat. Repeated or prolonged skin contact with the liquid may cause dermatitis. TCE is acutely toxic to fresh water aquatic life at 45 parts per million (ppm).

- 2) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

Water from the Mississippi River is used by several municipalities as a potable water supply. This municipal water supply is threatened by the persistent presence of the aforementioned contaminants in the river.

Ingestion of corrosive materials can result in serious burns to the mouth, esophagus, or stomach. To protect human health, exposure to TCE in drinking water should be zero. Concentrations of 27 micrograms per liter will increase the risk of cancer.

ENFORCEMENT

See confidential information in Attachment I.

PROPOSED PROJECT AND COST

The proposed action is to locate and overpack 22 drums located in 37 feet of water at the bottom of the Mississippi River. Divers will overpack the drums underwater to limit the release of contaminants into the river. The drums will be staged on-shore for eventual disposal at an incineration facility. This mitigative action is designed to reduce the threat posed by the drums to human health and the environment.

It is estimated that the removal action will require an additional nine 8-hour on-site working days, with several additional days required for mobilization and demobilization of the diving equipment. The detailed clean-up contractor costs are presented in Attachment II, and estimated project costs are summarized below:

ESTIMATED PROJECT COST TABLE

	<u>Current Ceiling*</u>	<u>Proposed Increase</u>	<u>Proposed Ceiling</u>
Cleanup Contractor	\$138,682	\$107,973	\$246,655
Contingency	20,802	16,196	36,998
Subtotal	159,484	124,169	283,653
 TAT/TES	 12,330	 5,000	 17,330
 Extramural Subtotal	 171,814	 129,169	 300,983
 Extramural Contingency	 25,772	 19,375	 45,147
TOTAL EXTRAMURAL COSTS:	197,586	148,544	346,130
 U.S. EPA Direct Costs	 3,300	 10,000	 13,300
U.S. EPA Indirect Costs	5,100	0	5,100
TOTAL INTRAMURAL COSTS:	<u>8,400</u>	<u>10,000</u>	<u>18,400</u>
 PROJECT TOTAL:	 \$205,986	 \$158,544	 \$364,530

* Costs are from the September 28, 1989 Action Memorandum.

RECOMMENDATION

Because conditions at the Quincy Drum Site have been documented to meet the National Contingency Plan 300.65 criteria for a removal action, your approval of the requested ceiling increase is recommended. With your approval, the estimated project ceiling will increase from \$205,906 to \$364,530. The TAT costs will increase from \$12,330 to \$17,330. The cleanup contractor costs will increase from \$138,682 to \$246,655. You may indicate your decision by signing below.

APPROVE:


DIRECTOR WASTE MANAGEMENT DIVISION

DATE:

10/4/89

DISAPPROVE:

DIRECTOR WASTE MANAGEMENT DIVISION

DATE:

bcc: D. Ouderkerk, OS-210
M. Elam/S. Hersh, 5CS-TUB-3
R. Jones, 5HS-10
R. Powers/R. Buckley, 5HS-GI
R. Bowden, 5HS-11
P. Schafer, 5HS-11
N. Nied, 5HS-11
R. Mancos, 5HS-11
L. Fabinski, ATSDR, 5HS-10
O. Warnsley, RP/CRU, 5HS-12
T. Lesser, 5PA-14
A. Anderson, 5MA-14
EERB Read File
EERB Delivery Order File
EERB Site File

ATTACHMENT I

CONFIDENTIAL ENFORCEMENT INFORMATION

Currently, one Patent---

Redacted-Information not relevant to selection of removal action.